NOTES ON SOME MISCELLANEOUS COLEOPTERA, WITH DESCRIPTIONS OF NEW SPECIES .- PART V.

By ARTHUR M. LEA, F.E.S., Museum Entomologist.

[Contribution from the South Australian Museum.]

[Read September, 12, 1919.]

PLATES XXV. TO XXVII.

Many interesting ants'-nest species are recorded in the present part, this being especially due to the efforts of Mr. J. S. Clark, in Western Australia, and Mr. F. Erasmus Wilson, in Victoria; others were also received from Messrs. W. and E. F. du Boulay (sons of the late F. du Boulay), from New South Wales and Western Australia; E. H. Zeck, New South Wales; H. W. Brown, Western Australia; R. J. Burton, A. H. Elston, and B. A. Feuerheerdt, South Australia; and F. P. Dodd and H. Hacker, Queensland.

Mr. Clark paid much attention to nests of the common twig-mount ant, Iridomyrmex conifera, Forel, (1) which builds mounds of small leaves and twigs that may often be fired. Shortly after he began the examination of the nests he wrote of them: --- "To date I have taken home fourteen nests, ants and all, and have very carefully sieved the lot. I cannot tell you all I have found, but I have 16 specimens of Cryptodus, 28 Articerus, 7 Scydmaenidae, 2 Ptinidae, 2 (?). I feel very pleased so far, as all the specimens, except Cryptodus, are quite new to me. I have also examined carefully six deserted nests of the same ants, but, except the Cryptodus, have found nothing. With this nest I find little in the top, or mound part of the twigs; I lift it right off, and drop it into a bag, then dig the ground out a foot deep into other bags, and number all the same, and I find that most of the beetles, etc., are on the top of the ground just under the twigs, and extending not more than three inches underground." Mr. Clark subsequently examined many other nests of the species, and found in them many other true inquilines, some of which are here recorded; but he also obtained other specimens that are certainly not true inquilines, his thorough method of search rendering it probable that some of the specimens taken in the nests were victims of the ants; nevertheless, it is desirable to put on record the names of such specimens. Recently he wrote:--- "I was sieving twig-mound nests most of the

(1) Name received from Prof. Wheeler.

holidays, and from two nests took 13 Chlamydopsis inquilina, 4 Enasiba tristis, 10 Scydmaenus, but I have not tried to count the various Articerus, Ectrephes, and Staphylinidae." Many of his takings of the Staphylinidae I hope to record at a later date; he also took some remarkable small flies and bugs.

Having recent occasion to examine many of the large wheat-stacks in New South Wales, Victoria, and South Australia, several introduced species of beetles, not previously recorded from Australia, were found in greater or less abundance; for the names of several of these I am indebted to Mr. G. J. Arrow, of the British Museum.

HYDROPHILIDAE.

PSEUDOHYDROBIUS FLAVUS, n. sp.

Flavous, some parts tinged with red. Upper-surface polished, under-surface subopaque, and very finely pubescent.

Head with small and rather dense punctures, clypeus with still smaller punctures, its suture distinct only at sides; labrum very small. Apical joint of maxillary palpi slightly longer than the subapical. *Prothorax* with slightly larger punctures than on head. *Elytra* with slightly larger punctures than on head, and with series of somewhat larger ones. Length, 3-4.5 mm.

Hab.—New South Wales: Blue Mountains (Blackburn's Collection), Wentworth Falls (A. Simson), Mount Victoria, Wollongong, Sydney, National Park (A. M. Lea), Richmond River (A. J. Coates); Queensland: Stradbroke Island (J. H. Boreham and H. Hacker), Mapleton (Hacker), Cairus (F. P. Dodd and Lea). Type, I. 8214.

Much smaller and paler than *floricola*, but with similar outlines; and, like that species, it may be taken from flowers (especially of the genus *Leptospermum*) producing nectar in abundance. The seriate punctures on the elytra are close together and moderately distinct, but not in striae, but there is a distinct sutural stria from the middle to the apex.

PSELAPHIDAE.

LEANYMUS MIRUS, n. sp.

Pl. xxv., figs. 1-3.

 σ . Light castaneous, antennae (eleventh joint excepted) somewhat darker. Moderately clothed with short, pale pubescence.

Head with three small foveae or large punctures triangularly placed: two between eyes and one in front. Antennae long, first joint cylindrical, about as long as three following combined, second—tenth subequal in length, the ninth and tenth slightly increasing in width, eleventh about as long as ninth and tenth combined and much wider. Palpi with two spiniform processes on apical joint, one on the penultimate, and two on the antepenultimate. A spiniform process also on the cardo of the maxillae. Prothorax strongly and evenly convex; punctures very minute. Elytra strongly convex; with a deep stria on each from middle of base to middle of disk, where it abruptly terminates; punctures sparse and small. Metasternum with a conspicuous oblique process on each side of middle. Abdomen with apical segment encroached upon by pygidium, this with a small fovea and 'several feeble nodes. Front legs with a spine on coxa and trochanter, femora rather stout, tibiae thin and bisinuate; middle tibiae thin, the hind ones thin and with a deep apical notch. Length 1'8-2 mm.

Q. Differs in having somewhat shorter antennae, metasternum unarmed, under-surface of abdomen not encroached upon by pygidium and legs somewhat shorter, with the front tibiae no more sinuous than the middle ones, and the hind ones not notched.

Hab.—Queensland: Cairns district (A. M. Lea). Type, I. 10650.

The processes on the metasternum are joined together at the base, at the apex each is obtusely bifid, although the cleft is very feeble on some specimens. From some directions the terminal joint of the antennae of the male appears to be regularly ovate, from others it is seen to be somewhat produced on one side of the base. The figures of L. palpalis (2) will give a good general idea of this remarkable insect, but it differs from that species in being smaller, apical joint of antennae paler than the preceding ones, and none black, armature of the metasternum notched, front tibiae bisinuate and hind ones notched. As on that species both sexes have the front coxae and trochanters armed. The notched hind tibiae even more clearly indicate the affinity of the genus with Palimbolus (Didimoprora), near which, despite the very different palpi, it was referred from the only other known species by Raffray; the spiniform process is so near the other part, however, that the notch could be easily overlooked. Five specimens were obtained by sieving fallen leaves at Malanda, of which one is a female, 94 other specimens, all males, were obtained at lights.

ARTICERUS SUBCYLINDRICORNIS, 11. Sp.

Pl. xxv., fig. 4.

 \mathcal{S} . Dark castaneous, disc of elytra paler. Moderately clothed with short, pale pubescence, denser on metasternum

(2) Proc. Linn. Soc. N.S. Wales, 1900, pl. x., figs. 5 and 6.

than elsewhere; a few hairs on abdomen, and a conspicuous fascicle on each side of base of its upper-surface, its excavated portion glabrous.

Head rather stout and finely granulate, with a vague median line; with a short subtriangular projection from mouth. Antennae not much longer than head, feebly dilated from near base to apex, circular in transverse section. *Prothorax* subquadrate, front angles rounded off, with a fairly large top-shaped fovea, surface granulate as head. Elytra densely and finely punctate; subsutural striae distinct. Abdomen with a wide and deep excavation at base of upper-surface, the excavation widely and shallowly encroaching on middle of convex portion; its under-surface incurved from apex to base, apex strongly encroached upon by pygidium, which is foveate. Prosternum with a conspicuous median keel between apex and coxae. Metasternum unarmed. Femora moderately stout, unarmed; front trochanters feebly dentate; tibiae thickened at apex, the middle ones feebly produced at inner apex. Length, 2-2.25 mm.

Q. Differs in having slightly shorter antennae, undersurface of abdomen evenly convex, the pygidium non-foveate, metasternum less depressed posteriorly, its clothing no denser than elsewhere, and the legs unarmed.

Hab.—Western Australia: Swan River, many specimens from nests of *Iridomyrmex conifera* (J. S. Clark). Type, I. 10626.

In size and general appearance somewhat resembling A. cylindricornis, but there are many differences of the head, under-surface, and legs, the antennae are shorter and stouter, and are feebly dilated from the base to the apex. The metasternum of the male is flattened and somewhat depressed posteriorly, its dense clothing causes the flat space to appear conspicuously triangular, and at each corner of the base of the triangle there is a feeble fascicle that has the appearance of a small tooth. The feeble armature of the legs (confined to the middle tibiae and front trochanters) is very unusual in the males of Articerus.

ARTICERUS WILSONI, n. sp.

Pl. xxv., figs. 5 and 6.

 σ . Castaneous, some parts slightly darker than others, basal half of antennae darker than apical half. Clothing as described in preceding species.

Head very short, part in front of eyes slightly wider than long, a shallow depression in middle between eyes, on each side of which is a minute black elevation; surface finely granulate. Antennae circular in transverse-section, basal half narrow and

lightly curved, then strongly dilated with the apex truncate. Prothorax subquadrate, front angles rounded off; with a large median fovea from base to near apex; basal half granulate, apical half punctate. Elytra with dense and moderately strong punctures, becoming smaller posteriorly; subsutural striae distinct. Abdomen with a wide and deep excavation at base of upper-surface, the excavation semicircularly encroaching upon middle of convex portion; its under-surface strongly incurved from apex to base. Metasternum ridged along middle, the ridge terminating near apex in a small acute Front *tibiae* with a feeble tooth near inner apex; tooth. middle femora stouter than the others; trochanters strongly dentate, tibiae with a small outer tooth near middle, and a narrow flange at the outer apex, inner apex with an acute tooth almost in line with the flange; hind legs thinner than the others and unarmed. Length 2-2²5 mm.

Q. Differs in having the under-surface of abdomen convex, and the metasternum and legs unarmed.

Hab.—Victoria: Eltham, in nests of ants under stones, July and August, 1918 (F. E. Wilson). Type, I. 10627.

One of the most distinct species in the genus. In my table it would be associated with A. hamatipes, on account of the middle tibiae, but the armature is very different: on that species it consists of a conspicuous dentiform flange about the middle, on this species there is a small median tooth, but the apex is armed both internally and externally; the tooth of the front tibiae is feeble and invisible from most directions, it is also partly concealed by clothing. The fascicles on the upper-surface of the abdomen are rather larger than usual, and on its under-surface there are some small, median ones that from some directions look like small teeth. The two minute black spots between the eyes are fairly distinct; similar spots may be traced on most species of the genus. The only female examined has been returned to Mr. Wilson, together with one of the males.

ARTICERUS MESOSTERNALIS, n. sp.

Pl. xxv., figs. 7 and 8.

 \mathcal{S} . Rather dark castaneous, disk of elytra somewhat paler. Clothing as described in *subcylindricornis*.

Head moderately long and (except for eyes) almost parallel-sided, densely granulate. Antennae rather thin and cylindrical, circular in transverse section, apical portion slightly dilated and truncate. *Prothorar* subquadrate, front angles rounded off; with a comparatively small and narrow medio-basal fovea: granules as on head, but punctate about apex. *Elytra* densely punctate; subsutural striae distinct. Abdomen with a large deep excavation at base of uppersurface, its middle semicircularly encroaching upon middle of convex portion; under-surface slightly incurved from apex to base, apex encroached upon by pygidium, the latter with a subtriangular fovea. Mesosternum with an acute subconical process between coxae. Metasternum convex along middle, but unarmed. Middle tibiae with a small subtriangular process at inner apex, legs otherwise unarmed. Length, 175 mm.

Hab.—Western Australia: Beverley, from a nest of a small black *Iridomyrmex* (E. F. du Boulay). Type (unique), I. 10644.

Somewhat like A. femoralis on an enlarged scale, or A. subcylindricornis on a reduced one; from both readily distinguished by the armed mesosternum. From some directions there appears to be a feeble shining median line on the head.

ARTICERUS DUBOULAYI, Waterh.

Pl. xxv., figs. 9 to 12.

Mr. E. F. du Boulay has recently taken at Beverley specimens of a species that appears to be duboulayi; they differ in some respects, however, from the original description and figure (it is to be noted also that the figure differs in some respects from the description). In the figure the fovea on the pronotum only represents its deepest part, it really occupies about half the width, and more than half the length of that segment. The antennae and front legs agree from some directions with the figure; but, as noted by Waterhouse, the former look very different from other points of view. The femora of the male were described as "much incrassated in the middle and somewhat compressed" but they are not so figured, and on the males before me it is only the middle femora that are much incrassated, and they are also bidentate. The hind tibiae from some directions agree with the description, but from others they are seen to be armed with a tooth behind the insertion of the tarsi, as a result, from some directions, the apex appears bifid; the apical portion is also clothed with The front and hind trochanters are briefly golden hairs. dentate, the middle ones are unarmed. The metasternum is ridged along the middle, the ridge becoming acute posteriorly, and shortly before its apex armed with a small tooth, on each side of the ridge the surface is strongly depressed. The undersurface of the abdomen has a depression on each side of the base, with a ridge between; between the apex of the ridge and the pygidium is another depression; there are also a few small fascicles. The female differs from the male in having antennae shorter, straighter, and without subapical notch, metasternum and under-surface of abdomen evenly convex,

and the upper-surface of the latter less conspicuously notched at the sides, legs unarmed and middle femora no stouter than the others. The strongly-inflated middle femora of the male associates the species with *tumidus* in my table, but the two species are otherwise very dissimilar.

ARTICERUS CONSTRICTIVENTRIS, Lea.

Specimens of this species have recently been taken by Mr. R. J. Burton in South Australia (Murray River) and by Mr. W. W. Froggatt in New South Wales (Hay). The male, hitherto unknown, differs from the female in having the pygidium encroaching upon the under-surface of the abdomen, and this is widely, shallowly, and somewhat irregularly depressed along the middle; the metasternum is convex along the middle, the convexity abruptly declivous posteriorly, and marked at its summit by a short process that is almost concealed by golden pubescence, the front tibiae are armed by a minute apical tooth, and the hind ones have a long apical bristle (both middle tibiae are missing from the only male before me).

ARTICERUS PASCOEUS, Sharp.

Mr. E. F. du Boulay has taken several specimens of this species in ants' nest at Beverley (Western Australia). In my table the male is noted as having "front tibiae conspicuously armed at apex." This is the case when both tibiae and tarsi may be seen clearly, but when the tarsi are pressed close to the apical tooth the latter might easily be mistaken for the former. Mr. Clark also took a specimen from the nest of a species of *Cremastogaster* near the Swan River.

ARTICERUS CURVICORNIS, Westw.

Specimens taken by Mr. F. P. Spry at Coburg and by Mr. H. W. Davey at Ararat (both in Victoria) differ from the normal form of *curvicornis* in having the antennae noticeably thinner, the prothorax somewhat wider, with the fovea somewhat shorter, and the oral seta of the male shorter, the clothing in general has also a more sericeous appearance; but I can find no positive characters of the legs that would warrant their specific separation.

ARTICERUS FOVEICOLLIS, Raffr.

Mr. J. S. Clark has taken specimens in abundance in nests of *Iridomyrmex conifera* about the Swan River, that probably belong to this species, despite some apparent discrepancies. In the description the antennae are noted as "capite plus duplo longiores," and they are so figured; but on the specimens before me, on careful measurement, they are seen to be less than twice as long as the head; they are also less conspicuously narrowed to the base than in the figure; the head is of peculiar shape, but the figure rather exaggerates the basal enlargement. In both sexes the four front femora are moderately angulate, the hind ones feebly so. The male differs from the female in having the antennae slightly longer, the prothoracic hump slightly more pronounced, the under-surface of abdomen incurved from apex to base (instead of strongly and evenly convex) with the pygidium encroaching upon it; the middle trochanters have an acute spine, and the middle tibiae have a short produced spur at the inner apex. In my table it would be associated with *fortnumi*, which is a much smaller and otherwise very different species.

ARTICERUS NITIDICOLLIS, Raffr.

Mr. F. E. Wilson has taken two females of this species in Victoria (Lorne) in October, in nests of *Ectatomma metallicum*, and of a small black species of *Iridomyrmex*.

- A. FORTNUMI, Hope. Hab.—Parachilna, Mount Lofty Ranges.
- A. DILATICORNIS, Westw. Hab.—Fern Tree Gully, Coburg.
- A. DENTIPES, Lea. Hab.-Parachilna.
- A. IRREGULARIS, Lea. Hab.—Coburg.

Now knowing *duboulayi*, *foveicollis*, and the male of *constrictiventris* additions to my table⁽³⁾ of males may be given as follows:—

a.	
r. Pronotum highly polished	nitidicollis
rr. Pronotum subopaque	constrictiventris
dd.	
s. Eyes on widest portion of head	fortnumi
ss. Eyes on narrowest portion (excluding neck) of head	foncienllis
ff.	Jovercours
t. Antennae gradually increasing in width	
from near base	hamatines
tt. Apical half of antennae suddenly becom-	namaripeo
ing much thicker	wilsoni
<i>gg</i> .	
<i>ggg</i> .	
Metasternum unarmed posteriorly.	
u. Mesosternum with an acute projection	
between middle coxae	
uu. Mesosternum not so armed B.	subcylinaricornis
v. Antennae no longer than head	tumidue
v. Antennae as long as head and prothorax	cumuuus
combined	duhoulani
(3) Ante, 1918, pp. 242, 243.	

TRICHOPTERYGIDAE.

RODWAYIA INTERCOXALIS, n. sp.

Pl. xxv., fig. 13.

Dark castaneous, apical portion of elytra, abdomen, antennae, and legs much paler. Length, 6 mm. Hab.—Queensland: Cairns district, from nests of ants

(F. P. Dodd). Type, I. 10682.

The outlines and punctures of this species are practically the same as in all others of the genus, and in agreement with the comments on ovata, (4) and the clothing consists of very short depressed pubescence, giving the upper-surface a finely sericeous appearance as on most of them; but it is darker than any other species; the abdomen is not entirely covered by the elytra, and the apical parts of the latter in consequence appear considerably paler than those parts that cover the former, but the colour of the elytra, apart from this, seems to gradually become paler from the base to the apex. The intercoxal process of the prosternum, which at first glance appears to be black, is wider than in any other described species of the genus, and its front end (the sides of which, however, I have been unable to see clearly on any of the specimens examined under the microscope) appears to be without the flange-like processes of the other species; its hind end is more obtusely notched than in any other species, except ovata, and each side is finely margined. The host ant is a reddish stinging species of the genus A mblyopone or near thereto.

RODWAYIA ORIENTALIS, Lea.

I recently took this species at Glen Innes (in abundance from nests of Camponotus nigriceps and of ('. aeneopilosus), Peak Hill (from nests of Camponotus novae-hollandiae and of a small black hairy Iridomyrmex), in New South Wales; and at Brisbane (from a nest of C. aeneopilosus), Mungar Junction (form a nest of Ectatomma metallicum), and Mount Tambourine (from nests of E. metallicum and Polyrhachis ammon), in Queensland.

RODWAYIA MINUTA, Lea.

Mr. E. L. Savage took a specimen of this species from an ants' nest on Mount Lofty in April, 1917; this being the only specimen of the genus I have seen from South Australia, although it has been repeatedly searched for in nests of species of Polyrhachis, Ectatomma, and Iridomyrmex, in which specimens may be obtained in abundance in New South

(4) Tas. Nat., 1907, p. 16.

Wales, Victoria, and Tasmania. I also took many specimens. of *minuta* from the nest of a small variety of *Ectatomma*: *metallicum*, on Mount Tambourine in Queensland.

HISTERIDAE.

CHLAMYDOPSIS INQUILINA, Lewis.

Many specimens taken by Mr. J. S. Clark about the Swan River from the nests of *Iridomyrmex conifera* appear to belong to this species; they agree well with the original description, but differ from the figure subsequently given in having the elytra across the epaulettes wider than any other part, instead of (as in the figure) narrower than across the middle; the difference may be sexual or due to inaccuracy of the figure. The deep notch in each epaulette, combined with the inconspicuous punctures and striae on most of the upper-surface, and the strongly and evenly elevated sides of prothorax, render the species extremely distinct.

In a note on the species⁽⁵⁾ a letter from Mr. Lewis was quoted recording the type as from Liverpool, in New South Wales; in the original description it was noted as from "Australia," and taken by du Boulay. Liverpool was probably noted in error, for, so far as I am aware, the late Mr. F. H. du Boulay was never there, whereas he did a lot of collecting from ants' nests in Western Australia.

CHLAMYDOPSIS COMATA, Blackb.

Mr. Elston has presented to the Museum a specimen of this fine species; he obtained it from a nest of *Ectatomma metallicum* (adjacent to a termite's nest) on the Mount Lofty Ranges.

CHLAMYDOPSIS EXCAVATA, Lea.

Mr. W. du Boulay took two specimens of this species (now first recorded from the mainland) from a nest of *Ectatomma* at Hunter Hill (near Sydney) in October.

CHLAMYDOPSIS TUBERCULATA, Lea.

Three specimens of this species were taken at Lorne (Victoria) by Mr. F. E. Wilson, from nests of a small black species of *Iridomyrmex*; one specimen was presented to the South Australian Museum, and another to the National Museum.

CHLAMYDOPSIS AGILIS, Lea.

A specimen of this species was taken at Nairne (South Australia) by Mr. W. L. Burton, from a nest of *Ectatomma metallicum*.

(5) Proc. Roy. Soc. Vict., 1912, p. 72.

CHLAMYDOPSIS LATIPES, n. sp. Pl. xxv., fig. 14.

Dark castaneous-brown, some parts (the metasternum and abdomen quite) black.

Head immersed in prothorax when at rest, face with shallow reticulate punctures. Antennae moderately long; scape curved at base, greatly dilated towards apex, outer portion with punctures as on face; funicle short, apparently six-jointed; club long and subcylindrical. Prothorax strongly transverse, front margin lightly elevated behind head, then with a strong oblique elevation to each side, sides scarcely elevated and somewhat sinuous, with a subconical tubercle in middle; with dense reticulate punctures; a narrow submarginal line at base. Elytra about as wide as long; most of surface shining and with minute (scarcely visible) punctures; epaulettes strongly raised and with punctures somewhat as on prothorax, a strongly elevated process between each epaulette and the suture, the process wide at the base, pointed at the apex, and with a conspicuous fascicle of golden red bristles, meeting a similar fascicle on a strong median elevation, the fascicles crossing a deep transverse subbasal impression, but between it and base a less depressed space with rounded outlines; outer walls with strong striae. Prosternum and mesosternum with punctures as on pronotum; metasternum shining, with a narrow median line; with small and not very dense punctures. Abdomen with punctures as on metasternum, pygidium and propygidium subopaque, and with much denser punctures. Legs long; femora densely punctate, grooved on one side throughout their length; tibiae wide and compressed, grooved on lower edge to fit into femora, with a shallow groove on inner side on the upper half for reception of tarsi, the grooves with an irregular fringe of setiferous granules, front ones dilating to about basal third, where there is a small tooth, then slightly diminishing to apex; the other tibiae wider and without the tooth, but otherwise somewhat similar. Length, 3.6 mm.

Hab.—Western Australia: Mount Henry, from a nest of ants (Dolichoderes (Hypoclinea) scabridus, Mayr.⁽⁶⁾), J. S. Clark. Type (unique), I. 10675.

With the reticulated pronotum and polished parts of elytra as in the Tasmanian *excavata*, to which it is closer than to any other known species, but much larger, and basal parts of elytra, including the epaulettes and their clothing, very different, tibiae even more dilated, etc. The tubercle on the pronotum is quite distinct when viewed from the side,

(6) Name received from Prof. Wheeler.

but is much smaller and otherwise different to that of *tuberculata*. When the head is extracted from the prothorax it may be seen that the latter has a large excavation or fovea, partially invisible from above, for the reception of each antenna. At first glance the elytra appear to have two large, round, deep foveae, but this is due to the crossing of the fascicles over the subbasal excavation, and to the sinuation of the epaulettes at the sides of this, where also there are membranes with stiff bristles, these somewhat shorter than the fascicles; the excavation is without lateral openings, but there is a shallow depression (representing them) on each side, to which the striae are directed.

CHLAMYDOPSIS STRIATIPENNIS, n. sp.

Pl. xxv., fig. 15.

Black; elevated front margins of prothorax, antennae (club infuscated), and legs reddish-castaneous.

Head immersed in prothorax when at rest; face with shallow reticulate punctures. Antennae not very long; scape curved at base, thickened to apex, with punctures as on face; funicle short, apparently six-jointed; club moderately long and subcylindrical. Prothordx strongly transverse, front margin narrowly elevated behind head, then more strongly elevated and curved to margins, narrowest at base; with dense reticulate punctures, in places becoming substriate. Elytra about as wide as long, closely but sharply striated; base much and suddenly wider than prothorax; epaulettes strongly raised, and crowned with stiff reddish bristles; subbasal impression not very large (in comparison with other species), its deepest part highly polished, not indicated on the sides; tips with numerous short setae. Prosternum, mesosternum, and parts of metasternum and abdomen with dense subreticulate punctures, elsewhere with small ones. Pygidium and propygidium with dense reticulate punctures, and numerous short setae. Legs long; femora thin, grooved for partial reception of tibiae; front tibiae rather thin at base, then strongly thickened, a small tooth marking the termination of the tarsal groove; middle tibiae slightly longer, rather stout, and with the dentiform projection almost less obsolete; hind tibiae longer, still less stout (but with the apical half still fairly thick), and without a dentiform projection. Length, 2.75 mm.

Hab.—Victoria: Lorne, from a nest of a small black Iridomyrmex in October (F. E. Wilson). Type (unique), I. 10676.

A strongly striated species, readily distinguished from all others of the genus by (in combination) great width across the shoulders, compared to the prothorax, epaulettes crowned with stiff reddish setae (not attached to a membrane), and by the greatly thickened front and middle tibiae. In my table it would be associated with *ectatommae*, which is a much smaller species, with very different legs. The elytra are strongly striated throughout, except at the bottom of the subbasal depression, the striae are mostly longitudinal, but many are oblique or sinuous, and a few near the base are transverse: on the outer walls they are not all directed towards a central point.

CHLAMYDOPSIS CARINICOLLIS, n. sp.

Black, antennae and legs castaneous.

Head immersed in prothorax when at rest; face with shallow reticulate punctures, and with two short longitudinal carinae, each ending in a small subconical tubercle. Antennae rather short: scape curved, strongly thickened, with punctures as on face; funicle short, apparently six-jointed; club long and subcylindrical. Prothorax strongly transverse, front margin lightly elevated and bilobed behind head, thence to sides strongly elevated and curved, sides behind where the margins join almost parallel, a narrow carina from apex to middle, a small tubercle on each side of and in line with its end, between each tubercle and the basal angles a short transverse carina, two small medio-basal tubercles; with dense, reticulate punctures. *Elytra* not much wider than prothorax, slightly wider than long; epaulettes moderately elevated; with a fairly large subbasal depression, extending almost to but not opening on to outer walls, and with a golden membrane overhanging it from the inner end of each epaulette, a narrow transverse carina on each at the apical third, extending to the outer wall but not to the suture; punctures, almost throughout, much as on pronotum. Middle parts of metasternum and of abdomen shining and with rather small but distinct punctures, rest of under-surface reticulate and sub-Propygidium with a short longitudnal carina, and opaque. with a transverse one at its junction with pygidium. Femora rather long and thin; tibiae strongly compressed, front ones with a strong tooth in middle, thence rapidly diminishing to each end, middle ones somewhat similar but the tooth less projecting, hind ones with greatest width slightly beyond the middle, the space between it and base quite straight (on the other tibiae it is distinctly curved), tarsal grooves on oblique outer edge. Length, 2 mm.

Hab.—Victoria: Beaconsfield, from a nest of Aphaenogaster longiceps, in July (F. E. Wilson). Type (unique), I. 10677. A suboblong black species, with a median carina on the pronotum as in *serricollis* and *pygidialis*, to which it is allied, but from both of which it differs in many respects. Seen obliquely from behind the middle portion of the basal depression appears to have some coarse punctures, the parts beyond the membranes appear to be almost circular and highly polished.

CHLAMYDOPSIS COMPRESSIPES, n. sp.

Castaneous.

Head immersed in prothorax; face with shallow reticulate punctures. Antennae rather short; scape curved, its apical half thick, with punctures as on face; funicle short, apparently six-jointed; club subelliptic. Prothorax strongly transverse, front margin slightly elevated behind head, thence to sides strongly elevated and lightly curved, sides feebly elevated and slightly curved, middle gently elevated and with a short feeble transverse carina; with shallow, reticulate punctures. Elytra slightly but distinctly wider than long, suddenly much wider than prothorax; epaulettes raised and rounded, with punctures as on pronotum, close to the inner side of each epaulette a narrow ridge conspicuously elevated above it, a small upright fascicle between its hind end and the margin; basal depression wide, deep, and semidouble, its ends partly concealed in places; with elongate, subreticulate punctures in middle, changing to simple striae; outer walls with numerous striae, all converging to a rather large but shallow fovea. Most of metasternum and of abdomen shining and with small punctures, rest of under-surface, pygidium, and propygidium opaque and with punctures as on pronotum. Legs long, thin, and compressed. Length, $2^{\circ}25 \text{ mm}.$

Hab.—Queensland: Mount Tambourine, taken from a nest of ants in December (H. Hacker). Type (unique) in Queensland Museum.

At first glance fairly close to *epipleuralis*, with which it would be associated in my table of the genus, but readily distinguished therefrom by the epaulettes and tibiae; on the present species each epaulette is conspicuously raised, and at its greatest elevation is not disconnected with the part behind it, and its side has a round fovea not connected with the basal depression, although in line with it; the inner process near each epaulette is also terminated by a narrow ridge elevated above it; the tibiae have the outer outline gently rounded off, instead of angulate in middle; *pallida*, with somewhat similar tibiae, has very different epaulettes. The elytra are distinctly wider than long, and at the base are much and suddenly wider than the prothorax; the legs, and especially the tibiae, are strongly compressed, so that although fairly wide they are thin, with the outer part of each tibia semi-transparent. From the species, *atra*, previously recorded from Mount Tambourine, it is distinct by its pale colour, and very different epaulettes and legs.

COLYDIIDAE.

EUCLARKIA, n. g.

Head irregular, about as long as wide. Eyes small and lateral. Antennae short, stout, three-jointed, first joint small and almost concealed, second very short, third cylindrical, its apex truncated. Palpi small, only apical joint of each exposed. Prothorax subquadrate, strongly costate. Scutellum Elytra closely applied to prothorax, strongly costate; small. epipleurae rather wide and parallel-sided to base of abdomen, thence narrowed to apex. Metasternum elongate; episterna rather narrow and parallel-sided. Abdomen composed of five segments, first and fifth subequal in length, second much shorter, third slightly shorter than second, and fourth than third. Legs short and fairly stout; front and middle coxae moderately separated, the hind ones more widely so; femora edentate; tibiae angularly dilated to beyond the middle, and then strongly narrowed to apex; tarsi with claw-joint almost as long as the rest combined, claws simple.

This remarkable genus is clearly allied to Kershawia, and in general appearance the species described below quite strongly resembles K. rugiceps on a small scale; with antennae removed there is no strong distinguishing feature. The antennae 'at first glance appear to be but one-jointed, but a very small basal joint (invisible from above) may be seen, and a second one applied like a thin disk to the base of the third, the latter has its apex slightly concave, and filled with sensitised pubescence as in so many inquilines. The mandibles are tightly clenched on all the specimens before me. Only four distinct tarsal joints are visible. The elytral episterna and base of abdomen on each side are somewhat depressed for the partial reception of the hind legs when at rest. Wings are present.

EUCLARKIA COSTATA, n. sp. Pl. xxv., fig. 16.

Rather narrow, depressed, opaque, with dense punctures all over. Brown or black.

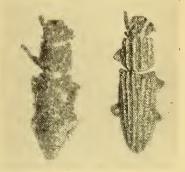
Head truncated in front, sides incurved from between antennae to eyes, beyond each of these a subconical projection,

and then narrowed to base; surface with about eight small elevations. *Prothorax* with six narrow costae from base to apex, the two median ones somewhat incurved at middle, the outer one on each side marginal. *Elytra* with narrow costae on prothorax; with geminate rows of rather strong punctures.

Length, 3-3.75 mm.

Hab. — Western Australia: Swan River, from nests of the twig-mound ant, *Iridomyrmex* (J. S. Clark). Type, I. 10651.

About half of the specimens are of a dingy black, the others vary to a rather light brown, but the apical half of the antennae is usually paler than the basal half, the two shades of colour being frequently rather sharply defined. On the elytra (counting



Euclarkia costata, Lea.

the sutural thickening as the first) the second costa is continuous from base to apex, but near the apex is joined by another representing the third and fourth, these joined together slightly beyond the middle, the fifth is joined to the third at the base, but its apex is free and subapical, the marginal costa is strongly curved at about the basal third; the sutural costae appear as one, except near the base, where they narrowly diverge. A very slow-moving-species, of which Mr. Clark obtained numerous specimens by sieving. It is one of the most interesting of the many curious species recently taken by him from nests of the twig-mound ant.

MYCETOPHAGIDAE.

LITARGUS BALTEATUS, Lec., Proc. Ac. Phil., 1856, p. 14.

Mr. Froggatt and I obtained numerous specimens of this species in some damp wheat bags at Enfield, near Sydney. I am indebted to Mr. G. J. Arrow for the name of the species, now first recorded as occurring in Australia.

SCARABAEIDAE.

BOLBOCERAS QUADRIFOVEATUM, n. sp.

Pl. xxv., fig. 17; pl. xxvi., fig. 44.

 \mathcal{S} . Castaneous, tips of some processes black. Underparts densely pilose.

Head with a strong, erect, densely punctate central horn; front face of clypeus semicircular and vertical, each side narrowly carinate, and just before the canthus appearing as a small subconical tubercle; mandibles not notched near apex. Prothorax with four strong processes projecting forwards, and almost equi-distant at their tips, front margin with a narrow impression across middle, becoming foveate at each side, front angles acutely produced; with a large deep fovea close to each submedian horn; with a few large punctures about middle, becoming crowded towards and on sides; basal gutter with punctures throughout. Scutellum impunctate. Elytra with small punctures in striae, of these the thirteenth and fourteenth very close together near base. Front tibiae with six teeth, hind pair with two wide carinae. Length, 20-21 mm.

Hab.—Queensland: Chillagoe (J. S. Clark). Type, I. 10659.

The apex of the prothorax is bifoveate, the foveae, however, lateral, but as the hind tibiae are not multicarinate Blackburn no doubt would have referred it to the first subgroup of group two, and it would there be associated with froggatti and armigerum, from the description of the former it differs in being smaller, and with the median processes of the pronotum closer together than in tenax, instead of more distant; from armigerum it differs in having the lateral processes of the head much shorter and the median horn much longer, the discal foveae of the prothorax are also considerably larger, but the horns are somewhat the same; with the heads removed specimens of the two species would probably be thought to belong to but one species; tenax, also with four transversely placed horns, has them more widely separated, the foveae smaller and deeper, and the cephalic horn bifid. The cephalic horn is about as long as the distance across the canthi; the prothoracic horns are somewhat compressed laterally, and rather obtusely pointed, the median ones are shorter than the one on the head, and somewhat longer than the lateral ones; in addition to the large punctures on the prothorax there are numerous minute indistinct ones. A second specimen is considerably darker than the type; its head and prothorax being dark brown.

BOLBOCERAS BISPINICOLLE, n. sp.

Pl. xxv., figs. 18 and 19; pl. xxvi., figs. 45 and 46.

♂. Pale castaneous, tips of some projections black. Under-parts densely pilose.

Head gently concave in middle, with two feeble subnodular elevations near base, in front with two strong spines projecting forwards and upwards, a narrow carina connecting the spines, and another connecting each with the canthus: mandibles gently incurved near apex, the right one notched. Prothorax widely declivious but not excavated in front; about one third from base with two strong curved spines or thin horns, at the outer base of each a large fovea shallowly connected with the small sublateral one; sides finely and acutely serrated; a few punctures obliquely placed behind each eye near apex, some at sides and others in basal gutter, elsewhere impunctate. Scutellum impunctate. Elytra with narrow punctures in striae. Front tibiae with five teeth, hind ones with two wide carinae. Length, 19 mm.

Q. Differs in having the head with more numerous punctures and granules, front face of clypeus crowned with four equi-distant subtriangular elevations; prothorax unarmed, with coarse irregularly distributed punctures, sublateral foveae smaller and the median ones absent, and with a rather short (not the width of the head) transverse bisinuate carina about one-third from apex.

Hab.—Western Australia: Geraldton (J. S. Clark). Type, I. 10660.

Allied to *frontale*, and with the head of the male somewhat similarly armed, but the spines of the prothorax are thinner and more divergent, and the large foveae or excavations are differently placed: on the present species each is subbasal and encroaches upon the hind part of a submedian spine, its nearest part to the margin being about twice its width; on *frontale* the excavations are considerably larger, some distance from the median armature, and each opens out on to à front angle; the females of the two species are very similar. The head of the male before and behind the frontal spines has numerous small subobsolete granules, elsewhere it is smooth and almost or quite impunctate.

BOLBOCERAS TRIUNUM, n. sp.

Pl. xxv., fig. 20; pl. xxvi., fig. 47.

 \mathcal{S} . Pale castaneous, tips of some projections infuscated or black. Under-parts densely pilose.

Head mostly flat, smooth near base, rather densely granulate elsewhere, front face of carina short, its middle crowned with a small tooth, this connected by a carina with a smaller tooth just above each antennal notch; each mandible with an almost rectangular notch, the front edge truncated. *Prothorax* with three rather small elevations arising from a fairly large common base, the median one carinated in front, a curved carina feeble but well defined and close to base in middle, and obscurely ending on each side between the elevations and the small sublateral fovea; sides finely and rather obtusely serrated; punctures crowded towards sides, irregular in front and sparse elsewhere. Scutellum with minute punctures. Elytra with small round punctures in striae, of the latter the thirteenth and fourteenth conjoined near base. Front *tibiae* with six teeth; hind ones with two wide carinae. Length, 16-17 mm.

Hab.—Western Australia (J. S. Clark). Type, I. 10658. Allied to *trituberculatum*, and with the head very similar, but the three prothoracic elevations much smaller, closer together, in line with each other (instead of the median one considerably in advance of the others) and arising from a common base.

RHOPAEA.

The species of this genus, although of large size, are very difficult to separate on superficial examination, and this difficulty is increased by the considerable variation that appears to be common in the individuals of several species. Thus verreauxi varies in a fashion that is almost exactly paralleled by magnicornis and assimilis (with the antennae missing it would be difficult, I believe often impossible, to be sure of the identity of specimens of these species); morbillosa is closely resembled by mussoni, rugulosa, and polita; hirtuosa by decipiens, etc. But the table given by Blackburn⁽⁷⁾ readily permits of the genus being split up into distinct and easily recognizable groups.

RHOPAEA NIGRICOLLIS, n. sp.

Pl. xxv., fig. 22; pl. xxvi., fig. 49.

 \circ . Of a dingy and rather pale castaneous-brown, sterna and parts of legs darker, head, prothorax, and scutellum black, antennae flavous. Closely covered with short, depressed, ashen pubescence, mixed with a few longer hairs, these fairly numerous on prothorax; sterna densely pilose.

Head rather strongly convex and with crowded punctures between eyes, becoming much larger and sparser on clypeus. Antennae ten-, flabellum seven-jointed, first joint of the latter very little shorter than the others. Prothorax apparently about twice as wide as long, sides strongly rounded and obtusely serrated, all angles rounded off, median line shallow and incomplete; with crowded but not very large punctures, and with some larger ones scattered about. Scutellum with crowded punctures. Elytra with vague remnants of discal costae; with small dense punctures, often finely wrinkled or transversely confluent, and with numerous considerably larger and deeper ones. Pygidium densely punctate and shagreened. Front tibiae strongly tridentate, the second tooth much nearer the first than third. Length, 18-20 mm.

(7) Trans. Roy. Soc. S. Austr., 1911, p. 189.

Hab.—Western Australia: Beverley (E. F. du Boulay). Type, I. 10792.

The sides of the prothorax are obscurely diluted with There is a rather dense fringe of hairs overlapping the red. base of the scutellum. The prothorax measures 8×5 mm., but to the eye it appears twice as wide as long. Of the species referred to AA, in Blackburn's table, it differs from soror in being much smaller and darker, prothorax with larger punctures, and third joint of the antennae of different shape; heterodactyla is a larger and paler species, and its third antennal joint has a spiniform process; in hirtuosa, pilosa, and australis the clothing of the head and prothorax is very different; in assimilis the third joint of the antennae is much longer, and the fourth of very different shape; from the description of laticollis it differs in having the prothorax no wider than in *pilosa*, the smaller elytral punctures not more strongly impressed than the smaller ones of that species, the size is smaller, colour darker, and clothing different. Ingeneral appearance it is like a small dark verreauxi, but its flabellum has one more joint than in that species. It is the first true species of the genus to be recorded from Western Australia.

RHOPAEA DECIPIENS, n. sp.

Pl. xxv., fig. 21; pl. xxvi., fig. 48.

 \mathcal{S} . Of a uniform and rather pale castaneous, some marginal parts and the tibial teeth darker. Clothed with fine, depressed, pale pubescence, some longer hairs scattered about on elytra, and becoming dense on parts of head and prothorax; sterna densely pilose.

Head strongly convex and with crowded punctures between eyes, becoming much larger and sparser on clypers. Antennae ten-, flabellum six-jointed. Apical joint of marillary palpi long, and with a narrow opaque furrow. *Prothorax* moderately long (55-75 mm.), sides strongly rounded and obtusely serrated, hind angles obtuse but not rounded off, base lightly bisinuate; median line short and feeble; punctures crowded but sharply defined. *Scutellum* with crowded punctures. *Elytra* with dense punctures of two kinds: small, shallow, and often transversely confluent ones, and considerably larger and deeper ones. *Pygidium* shagreened and with dense punctures. Front *tibiae* strongly tridentate, the second tooth slightly nearer the first than third. Length, 20-23 mm.

Hab.—New South Wales: Forest Reefs (A. M. Lea). Type, I. 4535.

On one of the specimens the sides of the prothorax and the pygidium are infuscated, but this appears to have been caused by partial decomposition. There is a dense fringe

of hairs, similar to those on the sterna, overlapping the base of the scutellum. The flabellum at first glance appears to be but five-jointed, as the produced part of its basal joint is much shorter than that of the following one, and from some directions is concealed. To the naked eye the elytra appear to have vague remnants of discal costae, but these disappear under a lens. One of the specimens before me bears Blackburn's name label "Rhopaea hirtuosa, Blackb." and in fact it strikingly resembles that species, but it belongs to a different section of the genus, as the flabellum, including the first short one, consists of but six joints, instead of seven. Of the males of the group AAA, it is distinguished from *verreauxi* by the shorter third joint of antennae, with the produced part of the fifth longer and more acute, the apical joint of the palpi is also much narrower; mussoni has the ramus of the fifth joint considerably longer and wider, and the palpi different; rugulosa has the upper-surface almost glabrous; from the description of dubitans it differs by the sides of the prothorax not being angular in the middle; by the table the third joint not "considerably longer than wide" should distinguish it from consanguinea.

PARALEPIDIOTA CAVIFRONS, n. sp.

Pl. xxvi., fig. 50.

¿. Pale flavo-castaneous, elytra and antennae paler, tibial teeth blackish. Head, prothorax, and scutellum with snowy-white, rounded or elliptic, depressed scales, becoming thinner and more or less setiform on elytra, abdomen, and parts of legs; sterna and parts of legs with dense, whitish hair.

Head strongly convex, and with rather large and dense punctures, becoming smaller and sparser in middle of base. Clypeus bilobed, margins strongly elevated. Antennae ten-, flabellum seven-jointed, first joint of the latter about one-fifth shorter than the others. Apical joint of maxillary palpi wide, with a wide shallow median depression. Prothorax strongly convex, sides widely rounded and finely serrated, all angles obtuse; punctures sparser than on head, and much sparser about middle. Elytra slightly dilated to beyond the middle, apices obliquely truncated; punctures fairly dense and moderately large, becoming smaller and sparser in parts, discal costae lightly defined. Pygidium rather strongly margined, apex feebly bilobed; punctures rather numerous. Front tibiae strongly tridentate, hind tibiae with unequal spurs at apex, the larger one dilated to beyond the middle, and then narrowed to apex. Length, 20-21 mm.

Hab.—Queensland: Chillagoe (J. S. Clark). Type, I. 10783.

Smaller and duller than *lepidoptera* and with two more joints to the flabellum. The white scales are fairly dense, but nowhere overlapping on parts of the head and prothorax, and many of them do not arise above their containing punctures. There is a dense fringe of long pale hairs over the base of the scutellum. The sides of the clypeus are strongly but not suddenly elevated, leaving a flat portion a little more than one-third of the median width, and about two-thirds of the length, the flat part with larger but sparser punctures than on the sloping ones.

LEPIDIOTA FROGGATTI, Macl.

Pl. xxvi., fig. 51.

Large specimens of this species are larger (up to 42 mm.) than any other specimens I have seen of the allied genera, such specimens have the femora and tibiae entirely black, and the hind femora have the setiferous punctures nowhere dense, and there is a comparatively wide space (about the median third) from which they are quite absent. The whole of the upper-surface is densely covered with short depressed setae, and there is a fringe of long hairs at the apex of the prothorax. Some specimens from the Coen River are smaller (29-34 mm.), clothing of the upper-surface somewhat sparser (not altogether due to abrasion), hairs of the metasternum of a rusty red, and with the antennae, palpi, and legs (tibial teeth excepted), more or less reddish; the setiferous punctures of the hind femora are more numerous but not dense.

var. STRADBROKENSIS, n. var.

Pl. xxvi., fig. 52.

A specimen from Stradbroke Island (taken by Mr. Hacker in October, 1911) in the Queensland Museum, probably represents a variety of the species; it is much smaller (26 mm.), no part (except the tibial teeth) is quite black, and the hind femora are densely covered with setiferous punctures, and their lower edge is finely serrated; the preapical callosities of the elytra are rather more pronounced; there is also no fringe of long hairs at the apex of the prothorax, and this is certainly not due to abrasion, as the clothing is in perfect order.

Systellopus ater, n. sp.

Pl. xxvi., fig. 53.

Black and shining. Under-surface and legs with black or blackish hairs.

Head convex and almost impunctate at base, flat and with crowded punctures elsewhere. Clypeus semicircular in

front, with margins lightly upturned; hind suture conspicuous, outcurved in front, incurved at sides. Labrum on the same plane as clypeus and rather more strongly upcurved in front; with an irregular row of strong punctures in front. Prothorax strongly convex, sides strongly rounded, hind angles widely rounded off; along middle and across a fairly wide space near base impunctate, elsewhere with rather small but sharply-defined punctures, irregularly distributed and nowhere crowded. Scutellum semicircular, with rather numerous punctures. Elytra with shoulders, sides, and apex rounded; sutural stria distinct, with several feeble geminate striae; much of the surface finely wrinkled, and with small scattered punctures. Pygidium impunctate along middle, finely asperate elsewhere. Legs short and thick; front tibiae strongly bidentate, hind pair about as long as the apical width. Length, 25 mm.

Hab.—Australia (J. S. Clark). Type (unique), I. 10791.

The species has the robust build of many female Dynastides, to which subfamily at first glance it appears to belong; but the clypeus, labrum, tibiae, etc., are in exact agreement with *Systellopus obtusus;* from which it differs in its high polish and much greater size, characters which also distinguish it from the description of *validus*. Both antennae and five of the tarsi have been broken, but the species is so distinct that I have not hesitated to describe the type. It was sent by Mr. Clark as from Chillagoe in Queensland, but as he had an accident with a box and some labels were mixed, the locality may be doubtful, and the specimen may have really been taken in Western Australia.

HAPLONYCHA MARGINIPENNIS, n. sp.

Pl. xxvi., fig. 54.

Dark castaneous-brown with an opalescent gloss; head and parts of legs black. Head with fairly numerous long hairs between eyes, and very numerous on two basal joints of antennae, prothorax completely fringed with long hairs, narrowly on sides and base, widely in front; sterna densely clothed with dark hair, in parts almost sooty, pygidium sparsely clothed and with a thin marginal fringe; elytra with two fringes.

Head smooth at base, with crowded and coarse punctures elsewhere. Clypeus with sides strongly narrowed to the front, which is strongly upturned; front face with dense punctures. Antennae nine-, club three-jointed; fourth joint slightly longer than third and fifth. Penultimate joint of maxillary palpi distinctly longer than antepenultimate, and slightly longer than apical. *Prothorax* widely transverse, sides strongly rounded, front angles produced and acute, hind ones rounded off; punctures rather small and not very dense, but becoming denser in front and on parts of base. Scutellum punctate on basal half. Elytra slightly dilated to beyond the middle; discal costae fairly well defined and bounded by geminate rows of punctures, the interstices with punctures much as on prothorax; suture briefly mucronate. Pygidium with dense punctures at base, small and sparse elsewhere. Front tibiae strongly tridentate. Length, 22 mm.

Hab.—Western Australia: Eradu (J. S. Clark). Type (unique), I. 10787.

Commencing near the base of each elytron there is a dense even fringe projecting downwards; from the base itself there is another fringe, but of longer and sparser hairs or setae mostly projecting outwards. The basal joint of the hind tarsi is fully as long as the second, but from most directions it appears to be slightly shorter. It is much the build of *solida*, of Blackburn's Group 4, whose elytra have similar double fringes, but the prothorax is rather densely clothed in front, and at the base has the long hairs characteristic of Group 2; in the table of that group it would be associated with *latebricola*, from which, as from all others of the group, it may be distinguished by its clothing.

HAPLONYCHA SUAVIS, n. sp.

Pl. xxvi., fig. 56.

Flavous and brightly iridescent, head, some marginal parts, and teeth of front tibiae reddish. Sterna moderately densely clothed with whitish hair.

Head smooth at extreme base, but with crowded punctures elsewhere. Clypeus widely rounded and strongly upturned in front. Antennae nine-, club three-jointed; fourth joint the length of third and slightly shorter than fifth. Penultimate joint of maxillary palpi slightly shorter than the adjacent ones. *Prothorax* widely transverse, sides strongly rounded in middle, front angles produced and not very acute, hind ones obtuse, but not rounded off; punctures very minute. *Scutellum* impunctate at apex. *Elytra* slightly dilated posteriorly; with rather small and not very dense punctures, geminate rows and discal costae ill-defined; suture not mucronate. *Pygidium* with fairly numerous punctures, except at apex. Front *tibiae* strongly bidentate; two basal joints of hind tibiae subequal. Length, 17 mm.

Hab.—Western Australia: Geraldton (J. S. Clark). Type (unique), I. 10789.

The upper-surface at first appears to be glabrous, but on the pronotum there is some very short evenly-distributed pubescence (continued on to the base of the elytra), that is scarcely visible from above, but fairly distinct from the sides; the pygidium has somewhat larger (but still very short) pubescence, and a weak marginal fringe; the elytral fringe is long at the base but very short at the apex. The punctures on the head, although crowded, are nearly all sharply defined, they are just as dense in front of as behind the clypeal suture, but become sparser and smaller on the front of the clypeus; on the prothorax they are very indistinct, unless the surface is wet, but from some directions they appear like minute reddish dots. From the sides, in certain lights, the elytra appear to have faint vermiculate impressions, connecting two or more punctures, but sometimes traceable almost from base to apex; from most directions, however, they are invisible. There is a median remnant of a longitudinal carina on the pygidium. Between the second tooth and the base of the front tibia there is a feeble undulation, but it could not fairly be regarded as a tooth. As the penultimate joint of the palpi is slightly shorter than the antepenultimate, the species cannot be referred to Blackburn's Group 4, and failing that it can only be referred to Group 7; in the table of that group it would be associated with testaceipennis, from which, as from all others of the group, it is distinguished by the very fine pubescence of the pronotum; the punctures between the eyes are also very much denser and coarser than on that species. In general appearance it is like *neglecta*, or a very small specimen of *ruficeps* (of Group 1), *marginata* (of Group 3), and griffithi (of Group 5).

HAPLONYCHA NIGRA, n. sp.

Pl. xxvi., fig. 55.

Black and shining, antennae (basal joint excepted), palpi and parts of tarsi more or less reddish. Upper-surface glabrous, except for a few hairs at sides of prothorax, and for a fringe of long hairs at sides of elytra; under-surface with long rusty-red hair, dense on sterna, sparser elsewhere.

Head smooth at base; with crowded punctures elsewhere but becoming sparser and sharply defined towards apex of clypeus. Clypeus with rather strongly elevated margins. Antennae nine-, club three-jointed; fourth joint slightly longer than the adjacent ones. Penultimate joint of maxillary palpi slightly longer than the antepenultimate, but distinctly shorter than the apical one. Prothorax widely transverse, sides strongly rounded, front angles strongly produced and acute, hind ones rounded off; with dense and fairly large sharply defined punctures, becoming crowded in places. *Elytra* slightly dilated to beyond the middle, suture not mucronate; punctures fairly large and dense, becoming crowded posteriorly, geminate rows and discal costae well defined. *Pygidium* with dense subasperate punctures, becoming crowded in corners, and sparse at apex. Front *tibiae* strongly tridentate; basal joint of hind tarsi longer than second. Length, 18.5 mm.

Hab.—Western Australia: Kuminin (E. F. du Boulay). Type (unique), I. 10793.

The punctures between the eyes are so crowded that part of the surface has a vermiculate appearance; the clypeus from behind appears to be truncated in front, but from directly above it is seen to be gently rounded. The penultimate joint of the palpi from some directions appears slightly longer, but from others no longer than the antepenultimate, hence, as the pronotum and pygidium are black, there need be no hesitation in referring this species to Blackburn's Group 8; from the species of that group he somewhat doubtfully identified as gagatina, Burm., it differs in being much larger, prothorax shining, with strong well-defined punctures, and the pygidium also with stronger punctures; from funerea it differs in the much coarser punctures of the entire uppersurface and pygidium, and the elytra without a conspicuous margining membrane; they have, however, an extremely short fringe projecting downwards that could be easily overlooked.

GLOSSOCHEILIFER BIDENTATUS, n. sp.

Pl. xxvi., figs. 57 and 58.

Reddish-castaneous; club of antennae and elytra flavous, suture base and margins of the latter darker. Upper-surface glabrous, except for a few long hairs in latteral gutters of prothorax; elytra with a short dense fringe of golden setae projecting downwards, and with a straggling fringe of long reddish hairs projecting outwards; sterna with dense whitish hair, rest of under-surface more sparsely clothed, the hairs darker, stiffer, and many arising from minute granules.

Head with fairly dense and not very large, but sharply defined punctures, coarser on basal half of clypeus than elsewhere. Clypeus gently rounded in front, margins modérately upturned. Labrum conspicuously produced and upturned in front. Antennae nine-, club three-jointed. Penultimate joint of maxillary palpi shorter than the adjacent ones. *Prothorax* strongly transverse, sides strongly rounded, front angles produced and acute, hind ones completely rounded off; punctures small and not very dense. *Elytra* slightly dilated to beyond the middle; punctures not very dense or large but sharply defined, geminate rows and discal costae feeble; suture not produced at apex. *Pygidium* strongly convex, punctures dense in places, not very large but more or less asperate. Front *tibiae* very strongly and acutely bidentate; basal joint of hind tarsi slightly shorter than second. Length 16-19 mm.

Hab.—Western Australia; Swan River and Geraldton (J. S. Clark). Type, I. 10790.

On the Swan River specimen, the larger of the two under examination, there are tufts on the front tarsal joints, probably indicating that it is a male; the shape of the labrum of the Geraldton specimen is not exactly the same as on the other, but it has the appearance as of being slightly malformed. At first glance the species appears to be quite an ordinary *Haplonycha*, like *testaceipennis*, *jungi*, *gracilis*, etc.; but with the produced labrum considered by Blackburn as sufficient to found the genus *Glossocheilifer*; its bidentate front tibiae readily distinguish it from *addendus* and *labialis*; in appearance it is fairly close to the former. Disregarding the labrum and associating it with *Haplonycha*, it would be referred to Group 6 or 7, probably the former.

GLOSSOCHEILIFER ADDENDUS, Blackb.

Recorded by Blackburn as probably from Western Australia. Mr. J. S. Clark has taken specimens at Geraldton, and both of us from near the Swan River.

STETHASPIS SQUAMOSUS, n. sp.

Pl. xxvi., figs. 59 and 60.

Coppery-green or coppery-purple, elytra, antennae, palpi, and legs more or less reddish. Irregularly clothed with white scales; tip of pygidium and parts of under-surface and of legs with long white hairs.

Head rather wide, rather lightly convex, with not very numerous but sharply-defined punctures of moderate size. Clypeus with hind suture strongly triangularly produced backwards, middle strongly convex, margins moderately elevated, front truncate; punctures denser and larger than on rest of head. Antennae nine-, club four-jointed and rather small, second joint almost as long as three following combined, fifth acutely produced on one side. Prothorax apparently twice as wide as long, sides finely margined, subparallel on basal half, thence oblique to apex, base with a conspicuous median lobe, the hind angles almost rectangular, apex gently arcuate, the front angles subarcuate, with an obtuse impunctate median line on basal half, elsewhere with punctures slightly smaller and usually sparser than between eyes. Elytra gently dilated to beyond the middle, apex widely truncate; each with fourteen deep striae, containing rather small

punctures; interstices regular, strongly convex and impunctate; a fine marginal membrane not extending to base. *Pygidium* and propygidium with small, dense, sublaminate punctures. *Mesosternum* with a strong process produced to front of front coxae, flat on lower-surface, arcuate above, and truncate at apex. *Legs* rather short, front tibiae strongly bidentate. Length, 14-16 mm.

Hab.—Queensland: Cairns district (F. P. Dodd, H. H. D. Griffith, and A. M. Lea). Type, I. 4840.

One specimen bears a note by the late Rev. T. Blackburn, "Not Xylonychus, probably female of gen. nov. very near Colymbomorpha," but as there appear to be only females of the species before me, I think it desirable to refer them to Stethaspis (=Xylonychus), from all the species of which they may be distinguished by the dense scales at the sides of the under-surface; the intercoxal process of the mesosternum is more produced than in eucalypti, being almost as in Phyllococerus purpurascens. The elytra have a slight metallic gloss, but their margins are conspicuously metallic. The scales are wide, and conspicuously dense, white, and overlapping at the sides of the under-surface, and on the middle of the propygidium, they are almost as dense on the sides of the pronotum, but individually narrower; on the rest of the uppersurface they are sparser and subsetose in character; on the elytra they are confined to the striae, on the pygidium and the rest of the propygidium they are fairly dense; there are usually three long hairs on each side of the prothorax. On the type there are seven punctures on the scutellum, but on the other specimens they are more numerous.

In a recent letter Mr. G. J. Arrow remarked, "It seems to me quite unnecessary to make a new genus for S. squamosus; we have four specimens of it, from Kuranda; they include both sexes, but the antennae of the male scarcely differ from those of the female."

COLYMBOMORPHA SPLENDIDA, n. sp.

S. Brilliant purplish-green with a coppery gloss; front of head, sides of prothorax, propygidium, pygidium, undersurface, and legs (hind tibiae and parts of tarsi excepted) flavous, with a coppery-green gloss. Upper-surface glabrous, under-surface almost so.

Head with sparse and small, but sharply-defined punctures. Clypeus about twice as wide as long, front truncated, disc rather strongly convex; punctures at apex and sides denser and stronger than between eyes. Labrum on the same plane as clypeus, narrow, apex gently incurved. Antennae nine-, flabellum six-jointed, the rami each about as long as

н

the clypeus is wide. Prothorax not twice as wide as long, base much wider than apex, front angles produced and almost equilaterally triangular; hind ones strongly produced, sharply angular and slightly embracing shoulders, base strongly bisinuate; punctures sparse and minute, becoming larger, although still sparse, on sides. Scutellum highly polished and impunctate. Elytra each obliquely truncated at apex, outlines continuous with those of prothorax; with rather strong, regular striae, containing shallow punctures, but these becoming more distinct towards base; interstices impunctate. Metasternum and hind coxae with rather large sparse punctures; intercoxal process of mesosternum obtuse and vertical in front. Front tibiae tridentate, apical tooth acute and moderately long, second small but acute, third very feeble. Length (d, Q), 9-11 mm.

Q. Differs in being slightly wider, abdomen more convex, legs shorter, antennal rami much shorter, and the fourth joint without one, so that the flabellum consists of but five joints, and the hind tibiae not entirely dark.

Hab.—New South Wales: Dorrigo (W. Heron and H. J. Carter from R. J. Tillyard). Type, I. 4851.

Differs from lineata in colour, in the polished and glabrous surface (the only clothing consists of a few stiff bristles on parts of the under-surface and legs) in the clypeus, etc.; the intercoxal process of the mesosternum is strong and well produced, but its front face is thick and rounded off; in *lineata* it is produced to an almost knife-like edge between the front coxae. In *Phyllococerus purpurascens*, which Blackburn considered⁽⁸⁾ should be referred to Colymbomorpha, the intercoxal process is not produced with a knife-like edge between the front coxae, but as a truncated process above them. In C. lineata the front of the clypeus is evenly rounded and conspicuously upturned, so that, when viewed from behind, the labrum is almost concealed, but on the present species it appears to be attached to the clypeus as in the Systellopides. By the characters noted by Blackburn,⁽⁹⁾ in dividing the Melolonthides into subtribes, this species would be referred to the Systellopides, in this agreeing with Phyllotocus, although both genera differ in many particulars from the members of that anomalous group.

SERICESTHIS SUTURALIS, Macl., formerly SCITALA. Scitala pruinosella, Brenske.

Blackburn (who also associated it with *pruinosella*) has commented upon the bad condition of the type of *suturalis* (it

⁽⁸⁾ Trans. Roy. Soc. S. Austr., 1911, p. 175.
(9) L.c., 1905, p. 276.

has lost five of its tarsi, both antennae, and all the palpi); but there is a specimen of the species in the South Australian Museum from Mackay, it has nine-jointed antennae, but the fifth and sixth joints are so thin and closely applied to the three-jointed club that it is difficult to see them clearly, the rami of the club are about the combined length of the two apical joints of the palpi, the basal joint of the hind tarsi is not much, but distinctly, longer than the second.

PHYLLOTOCUS RUFICOLLIS, Macl.

P. sericeus, Macl.

There are three specimens in the Australian Museum standing as types of *sericeus*, and all are of the species tabled by Blackburn⁽¹⁰⁾ as *ruficollis*, although he was dubious as to his identification of that species; the type of *ruficollis* was badly stained, but was partially cleaned for description. It is certainly not the species Blackburn identified and tabled as *australis*,⁽¹¹⁾ and which he thought might be *sericeus*.

PHYLLOTOCUS VARIICOLLIS, Macl.

Correctly identified and tabled by Blackburn.⁽¹²⁾

PHYLLOTOCUS BIMACULATUS, Er.

On the typical form of this species each elytron has a pale, completely-enclosed spot of variable size, on the basal half; on Tasmanian specimens the spots are usually smaller than on mainland ones.

var. NIGRIPENNIS, n. var.

Mr. H. J. Carter and I recently obtained at Strahan (Tasmania) numerous specimens that differ from the typical form in having the elytra entirely black; the paler parts are also of a brighter red.

var. BASALIS, n. var.

Mr. Aug. Simson obtained at Wentworth Falls (New South Wales), in company with typical specimens, numerous others in which two-fifths of the base of the elytra are pale, the dark part is usually, but not always, advanced along the suture to the base.

⁽¹⁰⁾ Trans. Roy. Soc. S. Austr., 1898, p. 24. (11) L.c., p. 23.

⁽¹²⁾ L.c., pp. 23 and 24.

' var. INSULARIS, n. var.

Mr. H. Hacker obtained on Bribie Island (Queensland) three specimens that are more highly polished than usual, they have only the apical two-fifths of the elytra infuscated (and not very deeply so) and a slight infuscation about the scutellum; they are also smaller (5.5-6 mm.) than the typical form.

PHYLLOTOCUS MACLEAYI, Fisch.

This species occurs in abundance on eucalyptus and other blossoms in New South Wales, Victoria, and Tasmania.

var. ASSIMILIS, Macl.

This was considered by Blackburn as a variety only of *macleayi*, and such is my own opinion.

var. PALLIDUS, n. var.

Six specimens taken between Karoonda and Peebinga (by Mr. G. E. H. Wright), one from Murray Bridge (by Mr. H. H. D. Griffith), and one from Lyndoch (by Mr. J. G. O. Tepper), differ from the typical form in being entirely pale.

PHYLLOTOCUS LURIDUS, Macl. (formerly CHEIRAGRA).

As the claws to the four hind legs of this species are long, thin, and simple the species by Blackburn's generic table of the Sericides must be referred to *Phyllotocus*. Although Macleay said "The male and female differ very little," both specimens (presumably the types) standing under the name in the Macleay Museum are males, each having three long antennal rami. The species occurs in Queensland (Mapleton and Blackall Range) as well as in New South Wales, and all those before me are more or less brightly iridescent, the elytra are flavous with the suture, and a variable amount on each side infuscated or black, each of the hind femora has a wide tooth or subtriangular flange at the middle.

PHYLLOTOCUS OCCIDENTALIS, Blackb.

This species occurs in South Australia (Karoonda to Peebinga) as well as in Western Australia; in commenting upon the types Blackburn remarked that the apices of the elytra were "almost devoid of fuscous shading"; some of the specimens in the museum are entirely devoid of it; such specimens may be readily distinguished from the variety *pallidus*, of *macleayi*, by the completely rounded off hind angles of the prothorax, and by the bidentate, instead of tridentate, front tibiae.

var. APICIFUSCUS, n. var. ·

Two specimens from Karoonda to Peebinga (G. E. H. Wright), and one from Mindarie (South Australia), have the apical fourth of the elytra deeply infuscated (almost black), they may be readily distinguished from the typical form of *macleayi* by the basal angles of prothorax and by the front tibiae.

PHYLLOTOCUS, sp.

An entirely pale specimen (from Edithburgh in the Blackburn collection) combines characters of two species, as the hind angles of the prothorax are rectangular as in *macleayi*, and the front tibiae bidentate as in *occidentalis*.

PHYLLOTOCUS MARGINATUS, Macl.

Specimens of this species taken on Stradbroke Island (Queensland) by Mr. Hacker are smaller (5 mm.), than usual, with part of the apex of the elytra black, and the pale marking on the sides of the prothorax of the female smaller than usual.

PHYLLOTOCUS AUSTRALIS, Boi.

Specimens of this species taken on Stradbroke Island by Mr. H. Hacker, and at Cairns by Mr. F. P. Dodd, are smaller (5.75 mm.) than usual, and with the pronotum, scutellum, and elytra (except for a slight infuscation of the latero-apical margins of the latter) entirely pale.

PHYLLOTOCUS USTULATUS, Blanch.

The prothorax of this common Western Australian species varies from entirely black (as on the type) to entirely reddish; several specimens before me have the prothorax reddish, with three infuscated spots: a moderately long median one and a small one towards each side.

PHYLLOTOCUS NAVICULARIS, Blanch.

In his table of the species of this genus Blackburn placed navicularis in the first section "A. Elytra glabrous (or nearly so) except along their lateral margin." But on many specimens before me the hairs are quite as numerous about the suture and base as on specimens of species he referred to "AA. Elytra clothed with hairs (at any rate along the suture and base)."

The typical form has the head, prothorax, and a large spot on each elytron black, the spots frequently have a greenish or bluish iridescence, on the sides they occupy about half the length; along the suture they are conjoined for about half their own length, being divided in front by a sutural extension of the reddish basal portion. The species is common in parts of Queensland and of northern New South Wales; in addition to the varieties noted below there are others in the Museum.

var. RUFIBASIS, n. var.

Four specimens from Cape York (H. Elgner), differ from the typical form in having only about one-fourth of the elytra reddish, the black being widely subtriangularly advanced in front, so that it almost extends to the scutellum.

var. ERYTHRODERES, n. var.

Three specimens from the Coen River (W. D. Dodd), differ in having the prothorax entirely reddish; on two of them the apical half of the elytra is dark, but the suture is pale for portion of the distance; on the third specimen the spots are as on the typical form.

var. APICALIS, Macl.

Three specimens from the Coen and Stewart Rivers (W. D. Dodd), and Cairns (E. Allen), differ in having the prothorax and four basal segments of abdomen reddish, but elytra with the apical markings typical; this form appears to be the one described from Port Denison by Macleay as *apicalis*. Three other specimens from Cape York (H. Elgner) agree with these, except that the black portion is advanced to cover slightly more than half of the elytra.

PHYLLOTOCUS LATEROFUSCUS, n. sp.

Flavous; an infuscate vitta occupying about one-third the length of each elytron near the side, abdomen slightly darker than metasternum. Glabrous except for a few stiff setae on sides of prothorax and of elytra, and on the legs.

Head flattened, and with scarcely visible punctures. Clypeus not distinctly separated from labrum in middle, their combined length about two-thirds of the basal width. Antennae nine-, club three-jointed, the lamellae rather short. *Prothorax* about once and one-half as wide as long, sides rather strongly rounded, front angles produced and acute, hind ones rounded off; punctures fairly dense, but small and inconspicuous. *Elytra* with rows of fairly large punctures in conspicuous striae, interstices gently convex, and of almost even widths, except that they become narrower towards the sides. Hind *corae* at sides much longer than metasternum; front tibiae bidentate; front claws uneven, the larger one moderately thick, but not appendiculate. Length, 5.5 mm. Hab.—Queensland: Endeavour River (Dr. A. R. Pulleine, and National Museum from C. French). Type, I. 10775.

In Blackburn's table of the genus this species would be placed beside occidentalis, from which it differs in the elytra being more strongly striated, with larger punctures, in the striae, and, by the dark lateral markings; it is not very close to any other species before me. The elytral vittae are rather narrow, and are quite distinct, but their outlines are not sharply defined. The clypeus in front is slightly upturned on each side, but not in the middle, the uplifted parts being almost concealed by the rather strongly elevated labrum, which appears to be pressed close to them. The upper-surface is only slightly polished, but it could hardly be called opaque. The abdomen is small and curved to the tip, so the specimens are probably males, despite the non-appendiculate front tarsi.

PHYLLOTOCUS BASICOLLIS, n. sp.

Q. Head and metasternum reddish-brown, prothorax and scutellum reddish-flavous, elytra black and brightly iridescent, but margins (except at base) pale, abdomen and club of antennae black, legs flavous, the hind tibiae infuscated at apex. Front and sides of prothorax, sides and apex of elytra and pygidium with flavous or reddish setae.

Head with small and crowded but distinct punctures. Clypeus not quite the length of an eye, and more than thrice as wide as long; labrum slightly more than half the length of clypeus, its margins lightly upcurved and the front one gently incurved to middle. Antennae nine-, club threejointed. Prothorax not much wider than the greatest length, basal half parallel-sided, front and hind angles produced and acute, the latter embracing shoulders; without punctures except for those containing the margining setae. Elytra with well-defined striae containing shallow punctures; interstices gently convex, moderately wide near suture, narrower towards the sides. Abdomen strongly convex, each of four segments with a conspicuous row of setiferous punctures. Hind coxae at sides almost twice the length of metasternum, and with sharply-defined but not very dense punctures; front tibiae tridentate; front claws equal and simple. Length, 5-55 mm.

Hab.—Queensland: Brisbane, November, 1912, and November, 1916 (H. Hacker). Type, in Queensland Museum; cotype, I. 10777, in South Australian Museum.

The hind angles of the prothorax embracing the shoulders are without parallel in the genus; the claws are all thin, simple, and long, but not of the great length that is usual in *Phyllotocus*, and in other respects it is not close to any other before me. The comparatively large, evenly-convex abdomen, with simple front claws, are indicative that the specimens taken by Mr. Hacker are females; one of them has beautiful golden depressed pubescence margining the base of the prothorax, of the elytra and scutellum, and forming a patch on each side of the pygidium; it is absent from the other, probably due to abrasion. The elytral, striae are almost absent posteriorly and about the shoulders.

PHYLLOTOCUS DECIPIENS, n. sp.

 \mathcal{J} . Black; elytra with two conspicuous flavous vittae. Sides of prothorax and of elytra fringed with dark setae.

Head gently convex and with small punctures between Clypeus about thrice as wide as the median length; eves. punctures denser and coarser than between eyes, sides moderately elevated, front not elevated in middle; labrum short, distinctly separated from clypeus, moderately upturned in Antennae eight-, club three-jointed. front. Prothorax scarcely one-fourth wider than long, sides gently rounded, front angles produced and acute, the hind ones almost rectangular; punctures as between eyes. Elytra with welldefined but not even striae, mostly containing distinct but not very large punctures; interstices gently convex, narrower towards sides than towards suture, with small but fairly distinct punctures. Hind coxae at sides scarcely one-fourth longer than metasternum; front tibiae tridentate; front claws unequal. Length $(\mathcal{J}, \mathcal{Q}), 5-65$ mm.

Q. Differs in having the club of the antennae somewhat smaller, abdomen larger, legs shorter, and front claws even.

Hab.—Victoria: Melbourne, eating grass, in October, 1911 (C. French, sen.), Oakleigh (C. French, jun.); South Australia: (F. Secker); Tasmania (Simson's collection). Type, I. 10839.

In general appearance strikingly like *meyricki*, from Western Australia, with which I had it confused, but the front part of the head is very different; on that species the clypeus and labrum are soldered together without a conspicuous suture, the front strongly upcurved, and a wide and feebly-punctate elevation occupying most of the base; on the present species the suture between the clypeus and labrum is well defined, the labrum is shorter, wider, and less elevated in front, and the subtubercular elevation of the clypeus is lower (although quite as wide) and with more conspicuous punctures. In Blackburn's table of the genus it would also be distinguished from *meyricki* by the tridentate, instead of bidentate, front tibiae; in that table it would be associated with *macleayi*, which is a larger and very differently-coloured species with head and legs different. The dark part of the elytral suture is wide and almost parallel-sided, but from each side the dark part is absent, or almost so, at the shoulder, and gradually dilates till near the apex it curves round to join in with the sutural part; the claws and parts of the tibiae, sometimes also other parts of the legs, are more or less reddish. Parts of the upper-surface and of the sterna have a pruinose bloom. From above the basal angles of the prothorax appear to be quite right angles, but from the sides they are seen to be slightly obtuse; most of the specimens have a vague median line. The front claws of the male are of even length, but the larger one increases much in thickness to the base, although it is not appendiculate.

PHYLLOTOCUS CRIBRICEPS, n. sp.

 σ . Black, elytra usually with some parts paler, and with a bright bluish iridescence; front legs mostly flavous, parts of the other legs obscurely diluted with red. Prothorax and elytra fringed with long and mostly pale setae, a few on head and many on under-surface and legs.

Head with dense, sharply defined, and rather small punctures. Clypeus obliquely flattened, sides slightly elevated; punctures as between eyes; hind suture distinct only at sides, the front one throughout; labrum short, sharply defined, rounded and gently elevated in front. Antennae eight-, club three-jointed. Prothorax about once and onehalf as wide as long, sides evenly rounded, apex evenly incurved with the front angles acute but scarcely separately produced, hind ones rounded off; punctures sharply defined, about as large as on head but not so dense. Elytra with strong striae containing rather large punctures, except posteriorly; interstices rather strongly convex, narrower towards sides than suture. Hind coxae at sides scarcely longer than metasternum, and both with distinct punctures; all femora stout, the hind ones especially so; hind tibiae shorter and stouter than usual, the front ones tridentate; front claws unequal, the larger one scarcely longer than the other, but more strongly curved, and with a large basal appendix. Length, 4.5-5 mm.

Hab.—Queensland: Mapleton, in October. Type, in Queensland Museum; cotype, I. 10837, in South Australian Museum.

As the antennal lamellae are long, the abdomen curved to its tip, and the front claws unequal, on each of the eight specimens from Mapleton, they are evidently all males. In general appearance the species is close to *luridus*, but is smaller, narrower, hind femora unarmed, and a smaller